

which would require significant updating in the Sending Package 1600 to address all the different data sizes and structures output from the Monitoring Package 1200. More particularly, the present invention may further utilize a system which defines an abstract class to interface between the Monitoring Package 1200 and the Sending Package 1600. This operation in the present invention allows the Sending Package 1600 to be isolated from the details of the CAbsUsageInformation sent from the Monitoring Package 1200. That is, with this approach, the Sending Package 1600 treats all of the CAbsUsageInformation sent from the Monitoring Package 1200 the same and does not have to determine how the data is represented and how much data is included in the CAbsUsageInformation (e.g., how many sessions of data are included therein, the data structure, etc.) Even more particularly, as shown in Figure 14, the CAbsUsageInformation is passed from the Monitoring Package 1200 to the Sending Package 1600 as an abstract class.

Specific details of utilizing an abstract class for the CAbsUsageInformation passed from the Monitoring Package 1200 to the Sending Package 1600 is disclosed in further detail in Applicants' copending U.S. application with attorney docket no. 5244-0099-2, the entire contents of which are hereby incorporated herein by reference.

Further, an abstract class can be utilized to package the CAbsUsageInformation and to encode the CAbsUsageInformation prior to the CAbsUsageInformation being passed from the Monitoring Package 1200 to the Sending Package 1600. Also, an abstract class can be utilized to validate and encode the CAbsUsageInformation prior to the Sending Package 1600 sending the usage data. More specific details of encoding and packaging the CAbsUsageInformation passed from the Monitoring Package 1200 to the Sending Package 1600 and the encoding and validating of the CAbsUsageInformation within the Sending Package are disclosed in Applicants' copending U.S. patent applications with attorney docket nos. 5244-0104-2X, 5244-0105-2X, and 5244-0106-2X. The entire contents of each of those applications is hereby incorporated herein by reference.

As noted above, in the present invention, usage of a target application 505 is monitored and logged in the Monitoring Package 1200 and is then sent by "store-and-forward" or direct communication by the Sending Package 1600.

TITLE OF THE INVENTION

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APPLICATION UNIT MONITORING AND REPORTING
SYSTEM AND METHOD WITH USAGE DATA LOGGED
INTO A MAP STRUCTURECROSS-REFERENCES TO RELATED APPLICATIONS

09/440692

Change(s) applied to document, /A.E.M./ 8/12/2011
The present application is related to attorney docket No. 5244-0104-2X, filed on even date herewith, entitled "Method and System to Monitor the Application Usage and Send Back the Information Using Connection and Connectionless Mode"; attorney docket No. 5244-0105-2X, filed on even date herewith, entitled "Method and System to Monitor the Application Usage and Send Back the Information Using Connection and Connectionless Mode"; attorney docket No. 5244-0106-2X, filed on even date herewith, entitled "Method and System to Monitor the Application Usage and Send Back the Information Using Connection and Connectionless Mode"; attorney docket No. 5244-0108-2, filed on even date herewith, entitled "Method and System of Remote Diagnostic, Control and Information Collection Using a Dynamic Linked Library"; U.S. Patent Application 09/408,443, filed September 29, 1999, entitled "Method and System for Remote Diagnostic, Control, and Information Collection Based on various Communication Modes for Sending Messages to a Resource Manger"; U.S. Patent Application 09/407,769, filed September 29, 1999, entitled "Method and System for Remote Diagnostic, Control and Information Collection Based on various Communication Modes for Sending Messages to Users"; U.S. Patent Application 09/393,677, filed September 10, 1999, entitled "Application Unit Monitoring and Reporting System and Method"; U.S. Patent Application 09/311,148, filed May 13, 1999, entitled "Application Unit Monitoring and Reporting System and Method"; U.S. Patent Application 09/192,583, filed November 17, 1998, entitled "Method and System for Communicating With a Device Attached to a Computer Using Electronic Mail Messages"; U.S. Patent Application 08/883,492, filed June 26, 1997, entitled "Method and System for Diagnosis and Control of Machines Using Connectionless Modes Having Delivery Monitoring and an Alternate Communication Mode"; U.S. Patent Application 08/820,633, filed March 19, 1997, entitled "Method and System to Diagnose a Business Office Device Based on Operating Parameters Set by a User," now U.S.P. 5,887,216; U.S. Patent Application 08/733,134, filed October 16, 1996, entitled "Method and System for Diagnosis and Control of Machines Using Connectionless Modes of Communication"; U.S. Patent Application 08/624,228, filed